

# ED20KEXT4PSW

Managed 10/100BASE-TX Ethernet Extender



## Product Highlights

### Features

- Distances up to 12.4 miles (20 km)
- Up to 15.3 Mbps in 2-wire operation
- Up to 30 Mbps in 4-wire operation
- Robust modulation method (SHDSL)
- Automatic SHDSL data rate detection
- Network transparent (no IP configuration required)
- Automatic detection of network cable type (auto MDI(X))
- Automatic network data rate detection (10/100 Mbps)
- Easy startup, plug and play
- Two digital outputs for alerting external controllers
- Remote diagnostics via IP and automatic event messages via SNMP

## Overview

EtherWAN's ED20EXT4PSW is a managed Ethernet extender with point-to-point connections, line and ring structures, data rates of up to 30 Mbps, distances of up to 12.4 miles (20 km) on in-house copper cables, replaceable surge protection, 2 SHDSL ports, 4-port switch, and diagnostics via display and Ethernet.

## Ordering Information

### Model

<b>ED20KEXT4PSW</b>	4-port Managed 10/100BASE-TX Ethernet Extender with 2 SHDSL ports
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# Hardware Specifications

Performance +	
Max Distance	12.4 miles (20 km): Depending on data rate and cable cross section
Max Speed	15.3Mbps in 2-wire operation 30 MBps in 4-wire operation
Cabling Limitations	Conductor cross section solid: Min: 0.2 mm <sup>2</sup> Max: 1.5 mm <sup>2</sup> Conductor cross section flexible: Min: 0.2 mm <sup>2</sup> Max: 2.5 mm <sup>2</sup> Conductor cross section AWG: Min: 24 Max: 16
Interface +	
Ethernet	4 x 10/100Base-T(X)
Extender Ports	1 x RJ45 socket
LED Indicators	Power, Device Information, Display Panel
Technology +	
Standards	IEEE 802.3
Processing Type	Auto-negotiation, SHDSL interface according to ITU-T G.991.2.bis
Power +	
Input	10 VDC to 60 VDC
Typical current consumption	90 mA (60 VDC), 200 mA (24 VDC) 450 mA (10 VDC)
Physical +	
Casing Material	Aluminum / steel sheet DC01
IP Rating	IP20
Dimensions	60 x 130 x 160 mm (W x D x H) 2.4" x 5.1" x 6.3"
Weight	1.7 lbs (27.7 oz/786 g)
Installation Type	DIN Rail
Environmental +	
Operating Temp.	-40 to 165°F (-40 to 74°C)
Storage Temp.	-40 to 185°F (-40 to 85°C)
Relative Humidity	10% to 95% (non-condensing)
Altitude	< 8200 ft (2500 m) (For restrictions, see the manufacturer's declaration for altitude operation)
MTBF	577 Years (SN 29500 standard, temperature 77°F/25°C, operating cycle 21%) 300 Years (SN 29500 standard, temperature 104°F/40°C, operating cycle 34.25%) 128 Years (SN 29500 standard, temperature 104°F/40°C, operating cycle 100%)

Regulatory +	
EMI	EN 50121-4 EN 55011
EMS	EN 61000-4-2 (ESD) EN 61000-4-3 (Radiated RFI) EN 61000-4-4 (Burst) EN 61000-4-5 (Surge) EN 61000-4-6 (Induced RFI)
Safety	UL Listed, cUL Listed, cULus Listed
Vibration	IEC 60068-2-6
Shock	IEC 60068-2-27
Electromagnetic	EMC Directive 2014/30/EU
Traffic	NEMA TS2
Warranty +	
Length	Limited Lifetime
Details	<a href="http://www.etherwan.com/support/warranty-policy">www.etherwan.com/support/warranty-policy</a>
What's Included +	
Device	Ethernet Extender
Cables	Preassembled data cable

# Software Features

Management +	
DHCP Client	
IPv4, IPv6	
SNMP	
Remote diagnostics via IP	
TCP/IP	
ARP	
Web management	
Security +	
System logging	
HTTP/HTTPS for web security	

# Diagrams

## Schematic Diagram (Front View)

- 1. Display Panel
- 2. SD Card Slot
- 3. Reset Button
- 4. 10/100 Ethernet Ports
- 5. Power 1 and Power 2
- 6. Digital Output 1 and Digital Output 2
- 7. Protection Module
- 8. SHDSL Connection
- 9. Info Button

